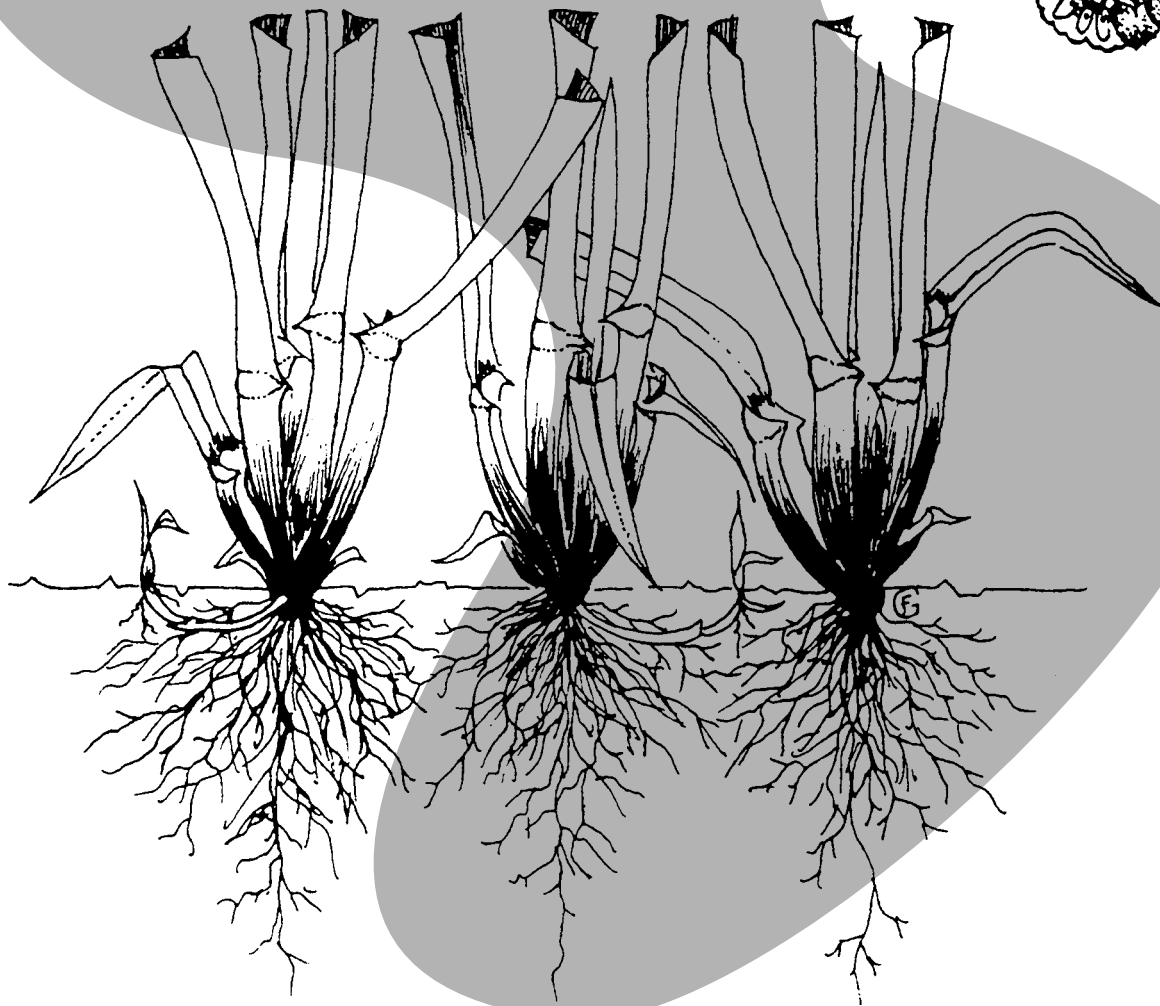


ORNAMENTALS

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# Grasses



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# Grasses



## Content Outline

### Turfgrass Selection and Establishment

- I. Turfgrass Selection
  - A. Selection Criteria
  - B. Turfgrass Species
    - 1. Kentucky bluegrass
    - 2. Perennial ryegrass
    - 3. Tall fescue
    - 4. Fine fescue
    - 5. Zoysiagrass
    - 6. Others grasses
  - C. Cultivars, Mixes, and Blends
  - D. Planting Recommendations
- II. Establishment Methods and Timing
  - A. Methods
    - 1. Seeding
    - 2. Sodding
    - 3. Plugging
    - 4. Sprigging
    - 5. Stolonizing
  - B. Timing
- III. Planting Site Preparation
- IV. Seeding
- V. Sodding
- VI. Establishing Turf in Difficult Sites
  - A. Slopes
  - B. Shady Sites
  - C. Problem Soils

### VII. Post-Planting Care—Seeded

### VIII. Post-Planting Care—Sodded

### Turfgrass Maintenance

- IX. Mowing
  - A. Practices
    - 1. Height
    - 2. Frequency
    - 3. Scalping
    - 4. Pattern
    - 5. First and last of season
  - B. Handling Clippings
  - C. Mowing Equipment
- X. Fertilizing
  - A. Minerals Required
  - B. Soil Fertility and Soil Testing
  - C. Fertilizer Selection
    - 1. Nitrogen
    - 2. Phosphorus
    - 3. Potassium
    - 4. Secondary nutrients and micronutrients
    - 5. Weed and feed products
    - 6. Species
    - 7. Environmental and management conditions
    - 8. Application
- XI. Irrigating
  - A. Role of Water in Lawn Quality
  - B. General Lawn Watering Information

- C. Lawn Watering Benefits and Considerations
  - D. Recommendations for Effective Lawn Watering
  - E. Additional Lawn Management Practices Related to Water Conservation
  - F. Management Practices for Unwatered Lawns
- XII. Cultivating and Dethatching
- A. Cultivating
  - B. Dethatching
    1. Problems
    2. Development
    3. Preventing thatch
    4. Dealing with thatch
    5. Timing thatch removal
- XIII. Renovating, Reestablishing, and Other Practices
- A. Renovating
  - B. Reestablishing
  - C. Other Practices
    1. Rolling
    2. Topdressing
    3. Colorants
- XIV. Maintenance Calendar
- XV. Weeds in Turfgrass
- A. Controlling Annual Grassy Weeds in Turf
  - B. Chemical Control of Annual Grassy Weeds
  - C. Weeds as Indicator of Turf Conditions
- XVI. Fungal Lawn Diseases
- A. Snow Mold
  - B. Powdery Mildew
  - C. Helminthosporium Leafspot
  - D. Leaf Smuts
  - E. Dollar Spot
  - F. Rust
  - G. Red Thread
  - H. Patch Diseases
  - I. Pythium Blight
- Grasses Used in the Landscape**
- XVII. Ornamental and Prairie Grasses
- XVIII. References
- XIX. Grass Seed and Plant Sources

# Turfgrass Selection and Establishment

A lawn is an important part of the home landscape. An attractive, well-kept lawn adds value to a home by improving its appearance. In addition, lawn grasses reduce mud and dust, absorb noise, control erosion, and produce oxygen. Proper establishment and maintenance are essential for any lawn to be healthy and look its best.

Planting a lawn entails selecting the turfgrass, selecting the method of establishment, properly preparing the soil, planting the turfgrass, and performing post-planting maintenance.

## Turfgrass Selection

An informed choice of a turfgrass should be based on selection criteria for your situation; information about the turfgrass species and their suitability to your site; an understanding of cultivars, mixes, and blends, and how to use them; and planting recommendations. This section, Turfgrass Selection, will address these important preplanting considerations.

### Selection Criteria

If you are establishing a lawn with seed, consider these criteria in order to select the best species and cultivars for your situation:

- desired quality of the lawn;
- appearance—turf color, leaf width, density, growth habit, and uniformity;
- use—turf purpose, such as aesthetics, athletic or play surface, erosion control;
- pest resistance—turf resistance or tolerance to disease and insect pests;
- culture—turf management requirements from the viewpoint of time and finances; and
- site—soil conditions and light availability of the final planting site.

Selection of the appropriate turfgrasses for your situation can reduce many lawn problems that may arise after establishment.

### Turfgrass Species

Cool season turfgrasses—Kentucky bluegrass, perennial ryegrass, tall fescue, fine fescues, and creeping bentgrass—are commonly used in Illinois, especially in the northern two thirds of the state. These grasses are easily established by seeding in the late summer/early autumn or spring.

Cool season turfgrasses grow best when soil temperatures are between 50° and 65°F and when air temperatures are between 60° and 75°F (Figure N-1). These conditions occur most commonly in spring and autumn in Illinois.

Without irrigation, cool season turfgrasses may become dormant during the high temperatures of summer. Therefore, spring-planted turfgrass may become

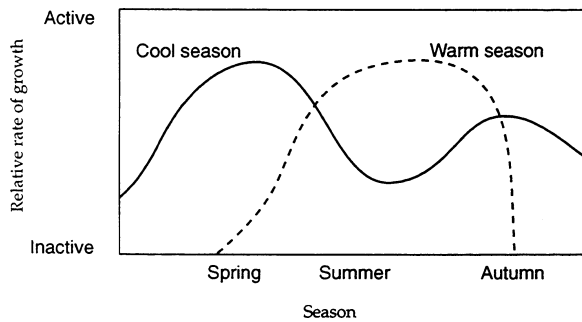


Figure N-1. Lawn growth cycles. The solid line represents a typical cool season lawn of Kentucky bluegrass; the broken line represents a warm season lawn of Bermudagrass or zoysiagrass.

stressed at an early age in its first growing season. Irrigation can reduce the stress considerably. Turf seeded in late summer/early autumn will probably escape high-temperature stress and grow nicely during the fall season. Given a choice, seed turfgrass in the late summer or early fall.

Warm season turfgrasses—zoysiagrass, bermudagrass, and buffalograss—are sometimes used in the southern portion of Illinois. Buffalograss is usually started by seed. Zoysiagrass and bermudagrass are most commonly established vegetatively by sod, plugs, sprigs, or stolons (see Establishment Methods for information on vegetative propagation). Zoysiagrass and bermudagrass lack cold tolerance and are poor choices for growing in northern areas.

Warm season grasses grow best when soil temperatures are between 70° and 90°F and air temperatures are between 80° and 95°F (Figure N-1). Thus, these grasses grow actively during summer's heat, and they are more heat and drought tolerant than cool season grasses. From midfall through midspring, warm season grasses are brown, dormant, and unattractive. Many gardeners feel this dormant appearance is undesirable.

The most commonly used turfgrasses in the East and the Midwest are Kentucky bluegrass, perennial ryegrass, tall fescue, the fine fescues, and zoysiagrass. Each species varies in its growth habits, appearance, and maintenance requirements. Growth habits include rhizomatous (spread by underground stems called rhizomes), stoloniferous (spread by aboveground stems called stolons), and bunch (gradual increase in clump size due to tillering). Appearance characteristics include overall turfgrass quality based on a combination of turfgrass color, leaf width, and density. Maintenance requirements include mowing, watering, fertilizing, cultivating, and controlling pests.

In addition, each of these grasses differs in its environmental adaptation, wear tolerance, recuperative ability, and use. Environmental adaptation refers to the environment in which each turfgrass will normally perform best. For example, each turfgrass has a preference for a particular type of soil and for a certain amount of light. Wear tolerance refers to a turfgrass's ability to withstand foot traffic, while recuperative ability indicates the turfgrass's ability to recover after damage resulting from insects, diseases, foot traffic, or environmental stresses. Finally, for each of the five most commonly used turfgrasses, information concerning its normal use is presented.

### Kentucky bluegrass, *Poa pratensis*

(Figure N-2)

**Establishment method:** seeding, sodding

**Appearance:** moderate to high quality depending on cultivar, management, and environment; medium texture; green to dark green with good density

**Growth habit:** rhizomatous

**Wear tolerance:** medium



Figure N-2. Kentucky bluegrass.